IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS

NORTHERN NATURAL GAS COMPANY,	)	
	)	
Plaintiff,	)	
	)	
v.	)	No. 08-1405-WEB
	)	
L.D. DRILLING, INC.,	)	
VAL ENERGY, INC., and	)	
NASH OIL & GAS, INC.,	)	
	)	
Defendants.	)	
	)	

Memorandum and Order

In May of 2009, the court entered an order allowing plaintiff Northern Natural Gas Company to test four gas wells operated by defendant Nash Oil & Gas, Inc. *See* Doc. 60.[1] On July 6, 2009, Northern filed a motion for preliminary injunction. Doc. 104. The motion asserts that the test results and other evidence show that the gas being produced from these wells is Northern storage gas, and it seeks an order directing Nash to pay into court or to place into escrow any proceeds from the sale of gas from these wells. The matter came before the court for an evidentiary hearing on Northern's motion on December 14, 2009. The court took the motion under advisement at the conclusion of the hearing.

I. *Summary of Evidence*.

The following is a brief summary of the evidence presented to the court in connection with Northern's motion. Northern's memorandum and reply in support of the motion included

[1] The four Nash wells at issue are: the CRC #1, CRC #2, Trinkle #1, and Staab #1. The instant motion for preliminary injunction pertains only to these four wells. References in this order to "the Nash wells," unless otherwise noted, refer only to these four wells.

affidavits or reports from three asserted experts. One of the experts is Paul D. Boehm, Ph.D., a scientist with the consulting firm Exponent, Inc. Doc. 105-2. Dr. Boehm's resume shows he has written extensively in peer-reviewed journals and has worked on a variety of issues relating to hydrocarbons. His work focuses on areas relevant to the issue at hand, including the use of forensic techniques to discern the origin and sources of natural gas.

According to Dr. Boehm's affidavits and report – as well as his testimony – he applied accepted "geochemical fingerprinting" techniques to determine the origin of the gas being produced by the four Nash wells. He examined the chemical composition of Northern storage gas and native Viola gas in the area, applied geochemical methods to differentiate the two, and applied those methods to determine the source of the gas being produced by the Nash wells.[2] He says two primary components serve to differentiate storage gas from native Viola gas in and around the Cunningham area: helium and methane. Based on his analysis of well data from an "area of interest" extending out about 8 miles in each direction from a point in the Cunningham Storage Field [See Pl. Exhs. 7,8], he says the data shows that the helium content in native Viola gas is greater than 0.56%, which is significantly higher than that found in Northern storage gas.[3] By contrast, according to Boehm, storage gas has low helium content, averaging 0.089% and always less then 0.2%. As for methane content, native gas in the area has relatively low methane

[2] The Nash well samples were analyzed for composition by Isotech Laboratory, which according to Dr. Boehm is a highly qualified independent lab. The samples were gathered pursuant to a sampling plan written by Dr. Boehm.

[3] Dr. Boehm states that helium in the native gas in the Cunningham area was high enough (from 0.64 to 1.22%) that a helium plant operated there during World War II. In his opinion – and as previously recognized by FERC – the presence of a high helium content is thus indicative of native gas. He characterized helium as a "natural tracer" for native Viola gas in this area.

content, below 80%, whereas storage gas has methane content higher than 80%.[4] In his opinion, geochemical fingerprinting analysis "is able to clearly and unambiguously differentiate native gas historically present in the Cunningham field area from storage gas" because "storage gas contains characteristically higher methane and lower helium contents compared to native Viola gas."

Boehm stated that gas samples from the four Nash wells all showed similar compositions, with a high methane content (from 87.6 to 91.7%) and low helium content (from 0.043 to 0.151%). According to Boehm, a statistical analysis of these results shows with a 99% confidence level that gas from the Nash wells is a geochemical fingerprint match with storage gas. He says this was confirmed by the use of stable carbon isotope analysis, which involved a comparison of the stable carbon isotope in ethane [$\delta^{13}C_2$]. The stable isotope analysis was only used as a confirmatory tool, he said, because most of the historical native Viola gas databases did not contain isotope information.[5] Based on his analysis, Boehm's opinion is that the natural gas being produced from the four Nash wells is Northern's storage gas.

In its response to the motion, Nash submitted an affidavit from Andy Davis, Ph.D., a geochemist who reviewed Northern's claims. Dr. Davis believes Northern's claims are "premature until a full analysis of the gas geochemistry has been completed." He faults Dr. Boehm for "selective use of data," saying Boehm only considered 24 wells out of "approximately

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[4] Dr. Boehm's affidavit states that storage gas is processed to remove liquid hydrocarbons, so as to reduce pipeline condensation. This processing increases the methane content (C1) compared to the other hydrocarbon components (C2+). Thus, a high methane ratio (C1/C2+) is indicative of storage gas. He states that the methane content of storage gas in this case ranged from 84.2 to 94.01%.

[5] Dr. Boehm testified at the hearing that, subsequent to his initial affidavit, he obtained additional isotope data for native Viola gas samples. That additional data is included on the second page of Pl. Exh. 19.

100 wells with current and historical data, leading one to question if the trends he demonstrates are consistent over the entire area." Dr. Davis argues that a complete analysis of all gas components and isotopes should be conducted. Davis also states that another method of identifying potential migration pathways would be to add a tracer to storage gas, something Northern has not undertaken. He says there has been "insufficient data analysis" to determine the source of the gas from the Nash wells. Additionally, Nash submitted an affidavit of Cary A. McGregor, P.E., who states his opinion that additional geologic and engineering data and studies are needed to confirm or rebut the existence of a migration pathway to the Nash wells.

In Northern's reply, Dr. Boehm asserted that Dr. Davis's criticisms were erroneous. Boehm cited exhibits showing that gas samples from the Nash wells and from the storage field were subjected to a full analysis of all components and isotopes, and that such information pertaining to native gas was considered to the extent it was available. Dr. Boehm states that his specific comparison of helium, methane, and stable carbon isotopes was appropriate under accepted methods of geochemical fingerprinting because those are the particular variables that differentiate native Viola gas from storage gas. Boehm denied selectively using data, stating that Dr. Davis's claim of data for some "100 wells" was unsupported and was not shown to be relevant. Finally, Boehm stated that injecting tracers into storage gas is a disfavored technique because of uncertainties in how long it takes to detect, the possibility that there are multiple pathways, and health and environmental concerns. Dr. Boehm also notes that Dr. Davis did not present any analysis of the data that contradicts Boehm's opinion that the gas from the Nash wells is storage gas.

Dr. Boehm's testimony at the December 14th hearing was essentially consistent with the

foregoing. He explained his findings and discussed the data in various exhibits. He considered additional data since his initial affidavit, including data from two observation wells drilled by Northern (the Henrichs #10-21 and the Guthrie #1-31) and additional well data from the KCC and other sources. Based on the new data, Dr. Boehm was of the opinion that the Guthrie #1-31 observation well just south of the Nash wells contains storage gas (methane from 90.6 to 91.3%; helium from 0.042 to 0.045%). Boehm also examined data from four wells north of the Nash wells, which he concluded were also producing storage gas. [Pl. Exhs. 11, 12]. Further to the north, Boehm said data from another group of wells showed a chemical composition of primarily storage gas with some native Viola gas. In Boehm's opinion, the data showed that storage gas is migrating to and through the four Nash wells and further to the north. Boehm identified several other wells as containing native Viola gas, including the Henrichs #10-21 (Northern observation well) to the southwest of the Nash wells. [Pl. Exh. 15]. Boehm's review of isotopic data, including changes in the "isotopic signature" of Northern's storage gas over time, led him to opine that the gas being produced by the Nash wells was recently (i.e. 2009) injected storage gas.

In addition, Northern has presented affidavits from geologist Thomas Cook and engineer Randal Brush. Cook's affidavit states that a review of pressure, production and gas analysis information confirms that a direct connection has always existed between the Cunningham field and the area to the north. Doc. 136-4. He contends a 2009 seismic survey by Northern, which is reflected in exhibits, confirms there are no underground faults or other barriers that would prevent gas from migrating north to the Nash wells. In his opinion, the new seismic data confirms Northern's claim of a broad "two-plus mile area" through which gas is migrating to the north. Cook also says the area is known for fracturing of the surrounding limestone, which in his

opinion has allowed the storage gas to migrate exceptionally fast to the Nash wells.

The affidavit of engineer Randal M. Brush, P.E., says there is a large amount of engineering data showing the four Nash wells are producing Northern storage gas. Doc. 136-5. Brush examined and compared the production rates from the Nash wells and pressures in the Cunningham field. He says there is an obvious relationship between the periodic increase and decrease in Cunningham Field pressure and a corresponding increase and decrease in total production of the four Nash wells. He states that this provides "strong evidence of a migration pathway from the Cunningham [Field] and the Four Nash Wells," and that the Nash wells' "unusual cyclic production behavior results from their close pressure communication with the Cunningham Field and their production of Cunningham Field storage gas." His point is illustrated graphically in a chart showing an apparent correlation between Cunningham Field pressure and subsequent total production from the Nash wells. Brush opines that the time interval between peaks in Cunningham Field pressure and corresponding peaks in Nash production has decreased (from 5-months to 3-months) as the Viola formation has become more gas-saturated and the flow pathway has become better established. Brush further stated that Nash has created extremely low bottom-hole pressures (560 psi to 718 psi), in part by using unusually large water pumping units. He says this has created a low pressure sink which increases gas migration from the high-pressure (1,067 psi) Cunningham Field. Lastly, Brush refutes any suggestion that the Nash production is "associated gas" [i.e., native gas evolved from oil accumulation], because the Nash wells produce insufficient oil for that to be the case and the gas composition is inconsistent with associated gas. In sum, Brush opines that the evidence shows "that a large migration pathway exists to the Four Nash Wells and that the Nash wells are

producing Cunningham Field storage gas."

Nash has submitted an affidavit from Jerry Nash, one of the owners of Nash Oil & Gas, Inc., who states that the company relies on the revenue from its gas production to pay its creditors; that without these revenues the company would be out of business; and that the revenues are also necessary to pay the expenses of this litigation.

Northern contends the evidence shows that the gas being produced from the four Nash wells is Northern storage gas, and it asks the court to protect the proceeds from the sale of the gas by requiring Nash to place the proceeds in a court-supervised account pending this litigation. Doc. 105 at 2. It asks the court to either: (1) issue an injunction directing Nash to place the proceeds in the court's registry; (2) establish a constructive trust over the proceeds and require Nash to deposit them in an escrow account; or (3) order Nash to place the proceeds in an escrow account pursuant to the court's powers to govern civil proceedings. Id. at 2-3.

On December 2, 2009, Northern filed an action in the District Court for Pratt County, Kansas, against the entities that purchase the gas produced by the four Nash wells and other wells. The petition against ONEOK Field Services Company, L.L.C. and others alleges that Northern holds title to the gas and that the purchasers' acts amount to conversion of Northern's property. On December 11, 2009, Nash filed a brief stating that because of Northern's suit against the gas purchasers, "no runs are being paid nor will be paid to Nash from the wells at issue in this case." It says the funds which are the subject of Northern's motion "are currently being held by ONEOK on behalf of Nash and will not be paid pending resolution of the issues in this case." Doc. 160 at 2.

At the December 14th hearing, defendant Nash stipulated that it has a 100% division

order. Under that order, Nash normally receives all of the proceeds from the sale of gas to ONEOK, including the royalty owners' share, and Nash distributes the funds according to the respective ownership interests. As noted above, however, ONEOK has currently suspended any payments to Nash for gas from the four Nash wells.

II. *Standards for Preliminary Injunction*.

To prevail on a motion for a preliminary injunction, the movant must establish that four equitable factors weigh in its favor:

(1) it is substantially likely to succeed on the merits;
(2) it will suffer irreparable injury if the injunction is denied;
(3) its threatened injury outweighs the injury the opposing party will suffer under the injunction; and
(4) the injunction would not be adverse to the public interest.

See Westar Energy, Inc. v. Lake, 552 F.3d 1215, 1224 (10th Cir.2009).

Because a preliminary injunction is an extraordinary remedy, the right to relief must be clear and unequivocal." *Greater Yellowstone Coal. v. Flowers*, 321 F.3d 1250, 1256 (10th Cir.2003); *Gen. Motors Corp. v. Urban Gorilla, LLC*, 500 F.3d 1222, 1226 (10th Cir.2007) ("In general, a preliminary injunction ... is the exception rather than the rule.").

Injunctions that disrupt the status quo are disfavored and "must be more closely scrutinized to assure that the exigencies of the case support the granting of a remedy that is extraordinary even in the normal course." *Schrier v. Univ. of Colo.*, 427 F.3d 1253, 1259 (10th Cir.2005). An injunction disrupts the status quo when it changes the "last peaceable uncontested status existing between the parties before the dispute developed." *Id*. at 1260. In such instances, the district court may not grant a preliminary injunction unless the plaintiff "make[s] a strong showing both with regard to the likelihood of success on the merits and with regard to the

balance of harms." *O Centro Espirita Beneficiente Uniao Do Vegetal v. Ashcroft*, 389 F.3d 973, 976 (10th Cir.2004) (en banc). This heightened standard accords with the historic purpose of the preliminary injunction, which is to "preserve the relative positions of the parties until a trial on the merits can be held." *See O Centro*, 389 F.3d at 977 (stating that the purpose of a preliminary injunction "is to assure that the non-movant does not take unilateral action which would prevent the court from providing effective relief to the movant should the movant prevail on the merits").

III. *Discussion*.

a. District court authority to issue preliminary injunction. Nash argues as a preliminary matter that Northern's motion is really an attempt to secure collection of a future money judgment in violation of the rule of *Grupo Mexicano de Desarrollo v. Alliance Bond Fund, Inc.*, 527 U.S. 308 (1999). In *Grupo Mexicano* the Court held that in an action for money damages, a district court lacks authority to issue a preliminary injunction "preventing the defendant from transferring assets in which no lien or equitable interest is claimed." *Id*. at 310. In the instant case, Northern seeks equitable relief as well as monetary relief (*see* Doc. 1 at Pp. 16, 23 – alleging unjust enrichment; seeking restitution, disgorgement, and a permanent injunction prohibiting defendants from engaging in conversion of storage gas), and it claims an equitable interest in the disputed property. *Grupo Mexicano* thus has no application in these circumstances. *See e.g., U.S. ex rel. Rahman v. Oncology Associates*, 198 F.3d 489, 496-97 (4th Cir. 1999). The court concludes that it has the authority to issue an injunction. *See Grupo Mexicano*, 527 U.S. at 318-19 (Judiciary Act of 1789 conferred federal jurisdiction over suits in equity).

(1). Likelihood of success on the merits.

Among Northern's claims against Nash is a claim for conversion, which alleges that Nash's wells are producing Northern storage gas. Under Kansas law, conversion is the unauthorized assumption or exercise of the right of ownership over goods or personal chattels belonging to another to the exclusion of the other's rights. *Gillespie v. Seymour*, 14 Kan.App.2d 563, 796 P.2d 1060, 1066 (1990). In order to prevail on such a claim, Northern will have to establish, among other things, that the Nash wells have produced or are producing previously-injected storage gas to which Northern holds title.

At this point, Northern has produced strong evidence that the gas being produced by the four Nash wells is storage gas from the Cunningham Storage Field. In fact, Northern's evidence to that effect is essentially uncontroverted. Dr. Boehm's opinion that the geochemical fingerprint of the gas matches Northern storage gas appears to be based on a reliable method supported by peer-reviewed articles. He analyzed available data to identify helium and methane content as key distinguishing features of native Viola gas and storage gas, citing both data and FERC precedent to support his findings, and determined the characteristic levels of these components through examination of data from a relevant area. He applied those factors to test results from the Nash wells and concluded that the tests clearly showed storage gas. The results were confirmed, he found, through use of isotope analysis. Dr. Davis faulted him for not considering additional data, but Davis produced no such additional data himself and cited nothing to show that Boehm's conclusions were contrary to available evidence. Nor did Dr. Davis show that Dr. Boehm's analysis is contrary to peer-reviewed standards of analysis. Davis's affidavit fails to demonstrate that Boehm's analysis is lacking in any material respect. In addition to the gas composition evidence, Northern cited evidence of recent seismic tests. According to geologist Thomas Cook,

the tests show no faults or barriers in the area to the north that would prohibit gas migration, and they further confirm migration of storage gas to the four Nash wells. Finally, Northern cited evidence of engineer Randal Brush, whose said an examination of Nash production and Cunningham Field pressures provides strong evidence of a migration pathway from the Cunningham Field to the four Nash wells. He also opined that the four Nash wells had low bottom pressures which were achieved with the help of extremely large water pumping units not normally found on gas production wells. The extensive production of water and gas by Nash has resulted in a "low pressure sink," according to Brush, that is causing a significant volume of gas migration from the high-pressure Cunningham Storage Field. Brush also refuted any suggestion that the Nash production might be "associated gas" from accumulated oil, pointing out that the evidence suggests otherwise. In Brush's opinion, the evidence shows that "a large migration pathway exists to the Four Nash Wells and that the Nash wells are producing Cunningham Field storage gas." Nash has cited no evidence to contradict any of these findings. The court recognizes that the parties are currently engaging in discovery, and Nash has no obligation to come forward at this point with contrary evidence. For purposes of the instant motion, however, the foregoing evidence shows that Northern is likely to prevail on its assertion that the four Nash wells are producing storage gas recently injected by Northern in the Cunningham Field. And under K.S.A. § 55-1210, Northern would thus likely be able to establish that it has title to the gas.

Nash contends it has "a number of valid and indeed compelling factual and legal defenses at its disposal in this case." Doc. 126 at 18. As noted above, however, Nash has not yet put forth any evidence to support its factual assertion that the gas from the Nash wells is not storage gas. Nor has Nash yet made any showing that it is likely to prevail on any counterclaims against

Northern. As for legal defenses, Nash argues, among other things, that Northern will have to prove that the gas migrated out of the storage field after July 1, 1993. But Dr. Boehm stated his opinion that the Nash wells were producing recently injected (i.e. 2009) storage gas. Nash cites no evidence to contradict that opinion. Nash also argues that Northern's claims are barred by res judicata, but the court previously rejected that argument in Nash's motion to dismiss, finding that Nash's alleged actions since the 2004 litigation formed the basis of a new cause of action. In sum, at this point Northern has shown that it is substantially likely to prevail on the merits of its claim for conversion, at least insofar as the four Nash wells are concerned.

(2). Irreparable injury without injunction.

Proving irreparable harm is the most important factor for obtaining a preliminary injunction. *See Chem-Trol, Inc. v. Christensen*, 2009 WL 331625 (D. Kan., Feb. 10, 2009) [cite omitted]. "To constitute irreparable harm, an injury must be certain, great, actual and not theoretical." *Schrier v. Univ. of Colorado*, 427 F.3d 1253, 1267 (10th Cir. 2005) [citations omitted]. Merely serious or substantial harm is not irreparable harm. *Id*. The burden is on the party seeking injunctive relief to show "that the injury complained of is of such imminence that there is a clear and present need for equitable relief to prevent irreparable harm." *Id*. Simple economic loss usually does not, in and of itself, constitute irreparable harm; such losses are compensable by monetary damages. *Id*.

Northern has presented no evidence to show that it will suffer any irreparable harm in the absence of a preliminary injunction. The only information before the court concerning the status of gas sales from the four Nash wells comes from defense counsel, who states in a filing that as a result of Northern's suit in Pratt County against ONEOK and others, "no runs will be paid to

Nash from the wells at issue in this case pending full resolution of all issues," and "[t]he funds which are the subject of Plaintiff's motion are currently being held by ONEOK on behalf of Nash and will not be paid pending resolution of the issues in this case." Doc. 160 at 2. The court fails to see any irreparable harm to Northern from this *status quo*. The only information before the court is that Nash is not in possession, and is not likely to come into possession in the foreseeable future, of proceeds from the sale of gas from the four Nash wells. Moreover, there is no evidence that any gas proceeds from sales at these wells is in danger of dissipation. Northern has sued ONEOK and the other gas purchasers in state court, and can presumably seek relief from the state court if there is a threat of irreparable injury to Northern regarding proceeds held or obtained by those entities. To the extent Northern claims that without an injunction it may suffer irreparable harm "to its ability to provide service to its own customers," Doc. 105 at 12, such an assertion is wholly unsupported by evidence and appears entirely speculative. In sum, there is no evidence before the court to support any finding that Northern will suffer irreparable harm without the requested injunction. As such, the court need not address the remaining requirements for issuance of an injunction.

IV. *Conclusion*.

Northern Natural Gas Company's Motion for Preliminary Injunction (Doc. 104) is DENIED. IT IS SO ORDERED this 22nd Day of December, 2009, at Wichita, Ks.

s/Wesley E. Brown
Wesley E. Brown
U. S. Senior District Judge